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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/647,255

Applicant(s)

VERGNAUD ET AL.

Examiner

JOSHUA JOO

Art Unit

2454

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/26/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/22)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

Detailed Action

This Office action is in response to Applicant's communication filed on March 17, 2010.

Claims 1-44 are pending for examination.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 17, 2010 has been entered.

Drawing

The drawing filed on August 26, 2003 is objected to because:

- 1) The figure is not numbered.
- 2) The figure does not include the following reference sign(s) mentioned in the description:

Terminals 8a, 8b, and 8c.

Corrected drawing sheets in compliance with 37 CFR 1.84 and 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing

sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

The “Brief Description of the Drawings” does not refer to the drawing by specifying a number of the figure as required by 37 CFR 1.74.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claim 1, Applicant is seeking to patent a server comprising control means. According to Applicant’s specification, the “control means” can take the form of software (Page 17, second paragraph). The claimed server does not comprise any functional hardware and could be considered as software. Software does not meet one of the four categories of invention and is not statutory.

Claim Objections

Claims 1-44 are objected to because of the following informalities:

Art Unit: 2454

- a) Regarding claim 1, the term “they” should be replaced with “the terminals” to clearly point out claimed subject matter and indicate what the term is referring to in the claim.
- b) Regarding claim 1, the term “therewith” should be replaced with “said local area network” to clearly indicate what “therewith” is referring to in the claim.
- c) Regarding claim 6, “the terminal” should be changed to “a terminal” and the phrase “so that said terminal” should be changed to “so that said terminal corresponding to said extracted MAC address” to clearly indicate which terminal “said terminal” is referring to in the claim.
- d) Regarding claims 28 and 32, the term “it” should be replaced with “said terminal” to clearly point out claimed subject matter.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-27, 30-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a) Regarding claims 1, 2, 4-6, 10, 13, 16-17, 19, 30-31, the phrase “adapted to” renders the claims indefinite since the phrase suggests or makes optional features but does not require the features. See MPEP 2111.04.
- b) Regarding claim 6, instances of the term “can” renders the claims indefinite since the term suggests that a step is possible but does not require the step.
- c) Regarding claims 7 and 8, “said first remote network” has insufficient antecedent basis.
- d) Regarding claim 8, “said second terminals” has insufficient antecedent basis.
- e) Regarding claim 11, it is unclear as to which MAC addresses “the MAC addresses in said table” are referring to since claim 4 recites “table containing primary MAC addresses” and claim 5 recites “table contains secondary MAC addresses”.
- f) Regarding claim 13, “said third terminals” has insufficient antecedent basis. Claim 6 recites “a third terminal”.

- g) Regarding claim 15, it is unclear as to which or what resources "the corresponding resources" is referring to in the claim.
- h) Regarding claim 32, instances of the term "can" renders the claims indefinite since the term suggests that a step is possible but does not require the step.
- i) Regarding claims 33 and 34, "said first remote network" has insufficient antecedent basis.
- j) Regarding claim 34, "said second terminals" has insufficient antecedent basis.
- k) Regarding claim 37, it is unclear as to which MAC addresses "the MAC addresses in said table " are referring to since claim 4 recites "table containing primary MAC addresses" and claim 5 recites "table contains secondary MAC addresses".
- l) Regarding claim 39, "said third terminals" has insufficient antecedent basis. Claim 32 recites "a third terminal".
- m) Regarding claim 41, it is unclear as to which or what resources "the corresponding resources" is referring to in the claim.
- n) Regarding claim 43, it is unclear as to how a local area network is selected from the Internet network or PSTN since the Internet and PSTN are wide area networks.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14, 16-17, 21-40, 42, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen, US Publication No. 2002/0075844 (Hagen hereinafter), in view of Yamaguchi, US Publication No. 2002/0178365 (Yamaguchi hereinafter).

As per claim 1, Hagen teaches substantially the invention as claimed including a processing server for allocating to user terminals resources of a local area network, said server adapted to be connected to at least one local area network access point, said server comprising:

control means adapted to

classify the terminals into a first group or a second group according to whether or not they establish a "type of" communication with said local area network (Paragraph 0048, 0050. Determine if terminal is registered and authorized, MAC is registered.); and

allocate resources of said local area network to terminals attempting to establish communication therewith as a function of whether they are classified in said first group or said second group (Paragraphs 0050-0051. Allocate resources if terminal is registered/authorized.).

Hagen teaches of classifying terminals but not specifically according to whether or not they establish an encrypted communication with said local area network

Yamaguchi teaches of classifying terminals according to whether the terminals establish an encrypted communication with a local area network (Paragraphs 0025, 0039; claim 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings to classifying terminals according to whether or not the terminals establish an encrypted communication with said local area network. The motivation for the suggested combination is that Yamaguchi's teachings would improve security in Hagen's teachings by controlling a level of access to resources based on security of a connection.

As per claim 28, Hagen teaches substantially the invention as claimed including a method of allocating resources of a local area network to user terminals via at least one access point to said local area network, said method comprising:

in the case of an attempt at setting up a connection with said local area network by a terminal of said terminals, classifying said terminal in a first group or a second group according to whether or not said terminal establishes a "type of" connection with said local area network (Paragraph 0048, 0050. Determine if terminal is registered and authorized, MAC is registered.); and

allocating resources of said local area network to said terminal as a function of whether it is classified in said first group or said second group (Paragraphs 0050-0051. Allocate resources if terminal is registered/authorized.).

Hagen teaches of classifying a terminal but not specifically according to whether or not the terminal establishes an encrypted connection with said local area network

Yamaguchi teaches of classifying terminals according to whether the terminals establish an encrypted connection with a local area network (Paragraphs 0025, 0039; claim 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings to classifying the terminal according to whether or not the terminal establish an encrypted connection with said local area network. The motivation for the suggested combination is that Yamaguchi's teachings would improve security in Hagen's teachings by controlling a level of access to resources based on security of the connection.

As per claim 2, Hagen and Yamaguchi teach the server according to claim 1. Hagen further teaches wherein said control means are adapted to determine a MAC address of each of said terminals attempting to establish communication with said local area network (Paragraph 0048. Lookup MAC address.); and said processing server further comprises means for allocating an IP address to each of said terminals attempting to establish communication with said local area network, and having the MAC address determined by said control means (Paragraphs 0052, 0068. Allocate IP address.).

As per claim 3, Hagen and Yamaguchi teach the server according to claim 2. Hagen further teaches wherein said allocation means are of the DHCP type (Paragraph 0052, 0066. DHCP.).

As per claim 4, Hagen and Yamaguchi teach the server according to claim 2. Hagen teaches the server further comprising a memory for storing a table containing primary MAC addresses associated with first terminals of said terminals, said first terminals adapted to exchange data frames encrypted in accordance with at least one format (Paragraph 0048, 0158-0159. MAC address in local database. Paragraph 0049. Encrypted communication.).

As per claim 5, Hagen and Yamaguchi teach the server according to claim 4. Hagen teaches wherein said table contains secondary MAC addresses associated with second terminals of said terminals, said second terminals adapted to exchange unencrypted data frames (Paragraphs 0048, 0050. MAC address in local database. Paragraph 0128, 0220. Unencrypted communication.).

As per claim 6, Hagen and Yamaguchi teach the server according to claim 5. Hagen teaches wherein: said control means are adapted to make a determination as to whether an extracted MAC address, extracted from a received frame, is one of said primary or secondary MAC addresses and, if said determination is affirmative, to send the allocation means a request to allocate a primary IP address to the terminal corresponding to said extracted MAC address, so that said terminal can set up a link with at least one first remote network and one second remote network and (Paragraphs 0048, 0158-0159. If MAC address is registered, provide IP address assignment. Access network with IP address.),

if said determination is negative, to send the allocation means a request to allocate a secondary IP address to the terminal corresponding to said extracted MAC address, referred to as a third terminal, so

that said third terminal can set up a connection with at least one second remote network (Paragraphs 0052, 0107. If MAC address not registered, provide temporary IP address.).

As per claim 7, Hagen and Yamaguchi teach the server according to claim 4. Hagen teaches the server characterized in that said first terminals are associated with said first remote network (Fig. 13; Paragraphs 0048, 0107. Clients of provider's private network.).

As per claim 8, Hagen and Yamaguchi teach the server according to claim 7. Hagen teaches characterized in that said second terminals belong to known users of said first remote network (Fig. 13; Paragraphs 0048, 0107. Clients of network.).

As per claim 9, Hagen and Yamaguchi teach the server according to claim 6. Hagen teaches wherein: each first remote network is selected from a group comprising private networks, IP data networks, and public switched telephone networks (Fig. 13; Paragraphs 0048, 0107. Private network, Internet.); and each second remote network is selected from a group comprising IP data networks and public switched telephone networks (Fig. 13; Paragraph 0107. Public access network, Internet, PSTN.).

As per claim 10, Hagen teaches the server according to claim 6, wherein said control means are adapted to allocate at least two priority levels for said allocation of resources of the local area network but not specifically according to whether communications are encrypted in accordance with said at least one format.

Yamaguchi teaches of allocating priority levels for allocation of resources according to whether communications are encrypted in accordance with at least one format (Paragraphs 0025, 0039; claim 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings to allocate priority levels for allocation of resources according to whether communications are encrypted in accordance with said at least one format. The motivation for the suggested combination is that Yamaguchi's teachings would improve security in Hagen's teachings by controlling a level of access to resources based on security of the connection.

As per claim 11, Hagen and Yamaguchi teach the server according to claim 10. Hagen further teaches wherein the MAC addresses in said table are stored in corresponding relationship to at least one of said priority levels (Paragraph 0050. Allocate resources and assign QoS level based on MAC address. Paragraph 0107. Priority levels).

As per claim 12, Hagen and Yamaguchi teach the server according to claim 11. Hagen further teaches wherein said priority levels comprise: at least one first priority level allocated to first terminals associated with primary MAC addresses; and one second priority level allocated to second terminals associated with secondary MAC addresses (Paragraph 0050. Allocate resources and assign QoS level based on MAC address. Paragraph 0107. Priority levels.).

As per claim 13, Hagen and Yamaguchi teach the server according to claim 12. Hagen further teaches wherein said control means are adapted to allocate a third priority level for allocation of resources of the local area network to said third terminals setting up communications not encrypted in accordance with said at least one format and whose MAC addresses are not in said table (Paragraph 0052. Terminal with address not located in database. Reduced communications. Paragraph 0107. Category of users and priority levels).

As per claim 14, Hagen and Yamaguchi teach the server according to claim 11. Hagen further teaches wherein said priority levels apply at least to a bandwidth, and said bandwidth decreases from the first level to the third level (Paragraph 0050. Bandwidth based on assigned QOS. Paragraph 0107. Levels of priority and bandwidth.).

As per claim 16, Hagen and Yamaguchi teach the server according to claim 10. Hagen further teaches wherein said control means are adapted to modify an allocated priority level as a function of the available resources of said local area network (Paragraph 0112. Alter bandwidth allocation. Paragraph 0183. Upgrade service plan.).

As per claim 17, Hagen and Yamaguchi teach the server according to claim 1. Hagen teaches said server adapted to be connected to said local area network by a cable connection (Paragraph 0056. Cable interface. Paragraph 0059. Connect to LAN.).

As per claim 21, Hagen and Yamaguchi teach a router, including a processing server according to claim 1 (Hagen: Paragraph 0054. NAS integrated with interface 14, i.e. router. Paragraphs 0066, 0185. NAS as router. Also see rejection claim 1).

As per claim 22, Hagen and Yamaguchi teach a local area network access point, including a processing server according to claim 1 (Hagen: Paragraph 0054. NAS implemented with WAP. Also see rejection claim 1).

As per claim 23, Hagen and Yamaguchi teach a communication installation comprising: at least one local area network accessible via at least one access point; at least one first remote network; at least

one second remote network; and a processing server according to claim 1, which is connected to said access point and said first and second remote networks (Hagen: Figs. 1 and 13. LAN connected to WAP. NAS connected to WAP, Internet, PSTN. Also see rejection claim 1).

As per claim 24, Hagen teaches the installation according to claim 23, wherein said local area network is a wireless local area network (Paragraphs 0042, 0045. Wireless LAN.).

As per claim 25, Hagen teaches the installation according to claim 23, wherein said processing server is connected to said first remote network via a virtual private network (Paragraphs 0070, 0146. Establish VPN between NAS and IODS. Paragraphs 0217-0218. IPSec between devices.).

As per claim 26, Hagen teaches the installation according to claim 23, wherein said processing server is connected to said first remote network via a remote access server (Paragraphs 0053, 0062. Connect to Internet. Paragraphs 0070, 0146. Connection between NAS and IODS.).

As per claim 27, Hagen teaches the installation according to claim 23, wherein: each said first remote network is chosen from a group comprising private networks, IP data networks, and public switched telephone networks ; and each said second remote network is selected from a group comprising IP data networks and public switched telephone networks (Fig. 13; Paragraphs 0048, 0107. Private network, Internet, PSTN).

As per claim 29, Hagen and Yamaguchi teach the method according to claim 28. Hagen further teaches the method comprising: in the event of an attempt by said terminal to set up a connection with said local area network, determining a MAC address of said terminal, and allocating an IP address to said

terminal (Paragraph 0048. Lookup MAC address from packet. Paragraphs 0052, 0068. Allocate IP address.).

As per claim 30, Hagen and Yamaguchi teach the method according to claim 29. Hagen further teaches the method comprising: providing a table containing primary MAC addresses associated with first terminals of said terminals, said first terminals adapted to exchange data frames encrypted in accordance with at least one format (Paragraph 0048, 0158-0159. MAC address in local database. Paragraph 0049. Encrypted communication.).

As per claim 31, Hagen and Yamaguchi teach the method according to claim 30. Hagen further teaches wherein said table contains secondary MAC addresses associated with second terminals of said terminals, said second terminals adapted to exchange unencrypted data frames (Paragraphs 0048, 0050. MAC address in local database. Paragraph 0128, 0220. Unencrypted communication.).

As per claim 32, Hagen and Yamaguchi teach the method according to claim 31. Hagen further teaches the method comprising: making a determination as to whether an extracted MAC address, extracted from a received frame, is one of said primary or secondary MAC addresses; and if said determination is affirmative, allocating a primary IP address to the terminal corresponding to said extracted MAC address so that it can set up a connection with at least one first remote network and one second remote network (Paragraphs 0048, 0158-0159. If MAC address is registered, provide IP address assignment. Access network with IP address); and if said determination is negative, allocating a secondary IP address to the terminal corresponding to said extracted MAC address, referred to as a third terminal, so that said third terminal can set up a connection with a least one second remote network (Paragraphs 0052, 0107. If MAC address not registered, provide temporary IP address.).

As per claim 33, Hagen and Yamaguchi teach the method according to claim 30. Hagen further teaches wherein said first terminals are associated with said first remote network (Fig. 13; Paragraphs 0048, 0107. Clients of provider's private network.).

As per claim 34, Hagen and Yamaguchi teach the method according to claim 33. Hagen further teaches wherein said second terminals belong to known users of said first remote network (Fig. 13; Paragraphs 0048, 0107. Clients of network.).

As per claim 35, Hagen and Yamaguchi teach the method according to claim 32. Hagen further teaches wherein: each first remote network is selected from a group comprising private networks, IP data networks, and public switched telephone networks (Fig. 13; Paragraphs 0048, 0107. Private network, Internet.); and each second remote network is selected from a group comprising IP data networks and public switched telephone networks (Fig. 13; Paragraph 0107. Public access network, Internet, PSTN.).

As per claim 36, Hagen teaches the method according to claim 32, wherein at least two levels of priority for allocation of resources of the local area network are allocated but not specifically according to whether communications are encrypted in accordance with said at least one format.

Yamaguchi teaches of allocating priority levels for allocation of resources according to whether communications are encrypted in accordance with at least one format (Paragraphs 0025, 0039; claim 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings to allocate priority levels for allocation of resources according to whether communications are encrypted in accordance with said at least one format. The motivation for the

suggested combination is that Yamaguchi's teachings would improve security in Hagen's teachings by controlling a level of access to resources based on security of a connection.

As per claim 37, Hagen and Yamaguchi teach the method according to claim 36. Hagen teaches wherein the MAC addresses in said table are stored in corresponding relationship to at least one of said priority levels (Paragraph 0050. Allocate resources and assign QoS level based on MAC address. Paragraph 0107. Priority levels.).

As per claim 38, Hagen and Yamaguchi teach the method according to claim 37. Hagen teaches wherein said priority levels comprise: at least one first priority level allocated to first terminals associated with primary MAC addresses; and at least one second priority level allocated to second terminals associated with secondary MAC addresses (Paragraph 0050. Allocate resources and assign QoS level based on MAC address. Paragraph 0107. Priority levels.).

As per claim 39, Hagen and Yamaguchi teach the method according to claim 38. Hagen teaches wherein a third priority level for allocation of resources of the local area network is allocated to said third terminals setting up communications that are not encrypted in accordance with said at least one format and whose MAC addresses are not in said table (Paragraph 0052. Terminal with address not located in database. Reduced communications. Paragraph 0107. Category of users and priority levels.).

As per claim 40, Hagen and Yamaguchi teach the method according to claim 36. Hagen teaches wherein said priority levels relate at least to a bandwidth, and said bandwidth decreases from the first level to the third level (Paragraph 0050. Bandwidth based on assigned QOS. Paragraph 0107. Levels of priority and bandwidth.).

As per claim 42, Hagen and Yamaguchi teach the method according to claim 36. Hagen teaches wherein an allocated priority level is modified as a function of the available resources of said local area network (Paragraph 0112. Alter bandwidth allocation. Paragraph 0183. Upgrade service plan.).

As per claim 43, Hagen and Yamaguchi teach the method according to claim 28. Hagen further teaches wherein said local area network is selected from the group comprising PSTN, PLMN, and Internet public networks, PABX private networks, and private communication gateways (Fig. 1 and 14; Paragraph 0043. Connection to Internet, PSTN).

Claims 15, 18, 41, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen and Yamaguchi, in view of Immonen et al. US Publication No. 2002/0132611 (Immonen hereinafter).

As per claim 15, Hagen does not specifically teach the server according to claim 14, wherein said control means send said access point data representative of said bandwidth assigned to a designated terminal, and said access point allocates the corresponding resources to said designated terminal.

Immonen teaches of an access control that sends to an access point, data representative of bandwidth assigned to a designated terminal, and said access point allocates the corresponding resources to said designated terminal (Paragraphs 0046, 0048-0049).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for said control means to send said access point data representative of said bandwidth assigned to a designated terminal, and for said access point allocate the corresponding resources to said designated terminal. The motivation for the suggested combination is that Immonen's teachings would improve the suggested system by providing different levels of service according to the terminal.

As per claim 18, Hagen does not specifically teach the server according to claim 17, said cable connection being an Ethernet link.

Immonen teaches of a server configured to be connected to a local area network by an Ethernet link (Paragraph 0074).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for said cable connection to be an Ethernet link. The motivation for the suggested combination is that Immonen's teachings would improve the suggested system by using networking that is a commonly used, reliable, and compatible with most LANs

As per claim 41, Hagen does not specifically teach the method according to claim 40, wherein said access point is sent data representative of said bandwidth assigned to a designated terminal, and said access point allocates the corresponding resources to said designated terminal.

Immonen teaches of sending data representative of bandwidth assigned to a designated terminal to an access point and allocating by said access point the corresponding resources to said designated terminal (Paragraphs 0046, 0048-0049).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings to send said access point, data representative of said bandwidth assigned to a designated terminal, and for said access point to allocate the corresponding resources to said designated terminal. The motivation for the suggested combination is that Immonen's teachings would improve the suggested system by providing different levels of service according to the terminal.

As per claim 44, Hagen does not specifically teach the method according to claim 43, wherein the PLMN public networks are mobile networks selected from the group comprising GSM, GPRS, and UMTS networks.

Immonen teaches of a GPRS local area network (Paragraph 0028).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the local area network to be a GPRS network. The motivation for the suggested combination is that Immonen's teachings would improve the suggested system by diversifying the networks that can be implement with the system and provide access/resource control with different types of networks.

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen and Yamaguchi, in view of Sisodia et al. US Publication No. 2003/0165128 (Sisodia hereinafter).

As per claim 19, Hagen does not specifically teach the server according to claim 1, said server adapted to be connected to said local area network by a radio link.

Sisodia teaches of a server configured to be connected to a local area network by a radio link (Paragraphs 0029, 0045).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the server to be configured to be connected to said local area network by a radio link. The motivation for the suggested combination is that Sisodia's teachings would improve the suggested system by providing different communication facilities to link a server with access points.

As per claim 20, Hagen does not specifically teach the server according to claim 19, wherein said radio link is a 802.11b radio link.

Sisodia teaches of a server configured to be connected to a local area network by a 802.11b radio link radio link (Paragraphs 0029, 0045).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the server to be configured to be connected to said local area network by a 802.11b radio link radio link. The motivation for the suggested combination is that Sisodia's teachings would improve the suggested system by providing different communication facilities to link a server with access points.

Conclusion

Examiner has cited particular sections of the reference(s) that are applied to the claims. While the sections are cited for convenience and are representative of the teachings of the prior art, other sections of the reference(s) may be relevant and applicable to the claims. It is respectfully requested that Applicant fully consider the reference(s) in its entirety when responding to the Office action.

A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966. The examiner can normally be reached on Monday to Friday 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Joshua Joo/
Examiner, Art Unit 2454